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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/778,486

02/07/2001

Christopher J. Edge

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7590

07/25/2005

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EXAMINER

SHAPIRO, LEONID

ART UNIT

PAPER NUMBER

2677

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

09/778,486

**Applicant(s)**

EDGE ET AL.

**Examiner**

Leonid Shapiro

**Art Unit**

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-16, 21, 23-30 and 34-43 is/are rejected.
- 7) ☒ Claim(s) 5-8, 17-20, 22 and 31-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 4-5, 9-10, 26, 29-30, 34-35, 41, 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine Weinmann et al. (Photoshop for windows), hereafter refer "Elaine" with copyright of 1996 in view of Yoo (US Patent No. 6,185,005 B1).

As to claim 1, Elaine teaches a method (See page 111) comprising:

estimating an initial gamma for display device based on selection of a displayed green element that appears to most closely blend with green background (See Fig 9 and page 256, Fig 2 and page 252, Fig 2 and page 111);

characterizing overall gamma for red, blue, and green channels of the display device based on estimated initial gamma (See Fig 9 and page 256);

modifying the overall gamma based on a gray balance evaluation for the red and blue channels (See Fig 9 and page 256, Fig 2 and page 111).

Elaine do not disclose dithered background.

Yoo teaches to use dithered background (See Col. 1, Lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Yoo into Elaine system in order to allow automatic gamma correction (See Col. 3, Lines 11-14 in the Yoo reference). Notice, that Yoo

uses the terms halftoning process equivalent to dithering process (See Col. 3, Lines 11-14).

As to claim 26, Elaine teaches a computer-readable medium containing instructions (See page 111) to:

estimate a gamma for display device based on selection of a displayed green element that appears to most closely blend with green background (See Fig 9 and page 256, Fig 2 and page 252, Fig 2 and page 111);

characterize overall gamma for red, blue, and green channels of the display device based on estimated initial gamma (See Fig 9 and page 256);

modify the overall gamma based on a gray balance evaluation for the red and blue channels (See Fig 9 and page 256, Fig 2 and page 111).

Elaine do not disclose dithered background.

Yoo teaches to use dithered background (See Col. 1, Lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Yoo into Elaine system in order to allow automatic gamma correction (See Col. 3, Lines 11-14 in the Yoo reference). Notice, that Yoo uses the terms halftoning process equivalent to dithering process (See Col. 3, Lines 11-14).

As to claims 4, 29 Elaine teaches selecting one of a first or second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first or second plurality of green elements and can

repeat this process many times and Yoo teaches dithered green background (See above the rejection of claims 1 and 29).

As to claims 9 and 34, Elaine teaches the estimated gamma is limited to the green channel (See Fig. 2 and page 111).

As to claim 10, 35, 41, 43, Elaine teaches how to estimate both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance (See Fig. 9 and page 256, Fig. 14 and page 15).

2. Claims 13, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine and Yoo as aforementioned in claim 1, 26 in view of "Why do Images Appear Darker on Some Displays? An Explanation of Monitor Gamma" by Robed W. Berger, copyright 1997 (referenced hereinafter as "Berger").

Elaine and Yoo do not disclose the dithered green background is dithered approximately 33% green background.

Berger teaches using gray values of 25% and 50%.

It would have been obvious to use dither gray values as background because of the conventionality of doing it and because two different gray areas (background and center square) need to be generated in different ways for the process to work.

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3. Claims 2-3, 27-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine and Yoo in view of Seegers et al. (US Patent No. 6, 439, 722 B1).

As to claims 2 and 27, Elaine and Yoo do not teach to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device.

Seegers et al. show how to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Elaine and Yoo method in order to display color images accurately and clearly.

As to claims 3 and 28, Elaine and Yoo do not teach the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for display on the display device.

Seegers et al. show how the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for display on the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Elaine and Yoo method in order to display color images accurately and clearly.

4. Claims 15-16, 21, 23-24, 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Seegers et al. in view of Elaine and Yoo.

As to claim 15, Seegers et al. teaches a system with a web server to transmit web pages to clients residing on a computer network See Fig. 1, item 14, in description See Col. 4, Lines 42-54); a color image server to transmit color images referenced by the web pages to the clients for display devices associated with the clients (See Col. 1, Lines 63-67 and Col.2, Lines 1-9); a color profile server to guide clients through a color profiling process and obtain information characterizing the color responses of the display devices associated with the clients (See Col. 1, Lines 63-67 and Col.2, Lines 1-9); one or more color correction modules to modify the color image server based on information to improve the accuracy of the color images when displayed on the respective display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9).

Seders et al. does not disclose the initial gamma being determined based on selection of a displayed green element that appears to most closely blend with green background, and gamma for red, blue, and green channels of the display device based on estimated initial gamma, wherein the overall gamma is modified based on a gray balance evaluation for the red and blue channels.

Elaine teaches the initial gamma being determined based on selection of a displayed green element that appears to most closely blend with green background (See Fig 9 and page 256, Fig 2 and page 252, Fig 2 and page 111), and gamma for red, blue, and green channels of the display device based on estimated initial gamma (See Fig 9 and page 256), wherein the overall gamma is modified based on a gray balance evaluation for the red and blue channels (See Fig 9 and page 256, Fig 2 and page 111).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Elaine into Seegers et al. system in order to effectively adjust color mix.

Seegers et al. and Elaine do not disclose dithered background.

Yoo teaches to use dithered background (See Col. 1, Lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Yoo into Seegers et al. and Elaine system in order to allow automatic gamma correction (See Col. 3, Lines 11-14 in the Yoo reference). Notice, that Yoo uses the terms halftoning process equivalent to dithering process (See Col. 3, Lines 11-14).

As to claim 16, Seegers et al. teaches the color image server the information to the client in the web cookie from the client to server, and the color image server modifies the color image via server based on the contents of the web cookie (See Fig. 1, item 24, in description See Col.1, Lines 63-67 and Col. 2, lines 1-9).



As to claim 21, Elaine teaches selecting one of a first or second plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first or second plurality of green elements and can repeat this process many times and Yoo teaches dithered green background (See above the rejection of claims 1 and 29).

As to claim 23, Elaine teaches the estimated gamma is limited to the green channel (See Fig. 2 and page 111).

As to claim 24, 42 Elaine teaches how to estimate both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance (See Fig. 9 and page 256, Fig. 14 and page 15).

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seegers et al., Elaine and Yoo as aforementioned in claim 15 in view Berger.

Seegers et al., Elaine and Yoo do not disclose the dithered green background is dithered approximately 33% green background.

Berger teaches using gray values of 25% and 50%.

It would have been obvious to use dither gray values as background because of the conventionality of doing it and because two different gray areas (background and center square) need to be generated in different ways for the process to work.

6. Claim 11-12, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine and Yoo as applied to claims 1, 26 above, and further in view of Seegers et al.

Elaine and Yoo do not disclose transmitting information representing the estimated blackpoint, gamma and gray balance to a remote server on the network; delivering the modified color image to the client via the computer network for the display on the display device.

Seegers et al. teaches transmitting information representing the estimated blackpoint, gamma and gray balance to a remote server on the network; delivering the modified color image to the client via the computer network for the display on the display device (Fig. 1, items 14, 24, in description See Col. 1, Line 64-67 and Col.2, Lines 1-9).

It would have been obvious to incorporate teaching of Seegers et al. into Elaine and Yoo system in order to display color images accurately and clearly.

7. Claims 14, 39-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Elaine and Yoo as aforementioned in claims 1, 15 in view of Craft et al. (US Patent No. 6, 349,300 B1).

As to claim 14, Elaine and Yoo do not show guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client.

Craft et al. teaches guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client (See Fig. 5, items 28, 30, in description See Col. 6, Lines 29-5900).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Craft et al approach in the Elaine and Yoo method in order to display color images accurately and clearly.

As to claim 39, Elaine and Yoo do not show guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client.

Craft et al. teaches guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client (See Fig. 5, items 28, 30, in description See Col. 6, Lines 29-5900).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Craft et al approach in Elaine and Yoo computer-readable medium in order to display color images accurately and clearly.

As to claim 40, Craft et al teaches the instructions are contained both in physical data storage media and signals transmitted between the client and other resources on the computer network (See Fig. 1, items 35, 18, in description See Col. 1, Lines 42-46 and Col. 2, Lines 20-33).

***Allowable Subject Matter***

9. Claims 5-8, 17-20, 22, 30-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claims 5, 22 and 30 the major difference between the teaching of the prior art of record (Elaine, Yoo, Seegers et al.) and the instant invention is that the first plurality of green elements represent greater gradations in green intensity that the second plurality of green elements.

Relative to claims 6, 17 and 31 the major difference between the teaching of the prior art of record (Elaine, Yoo, Seegers et al.) and the instant invention is that displaying a gray element having red, green and blue values substantially equal to the color value of the selected green element with the display device; displaying a plurality of red-blue shifted gray elements having a red value substantially equal to the color value of the selected green element and red and blue values shifted from the color value of the selected green element with the display device; selecting one of the gray element and the plurality of red-blue shifted gray elements displayed by the display device that appears to most closely blend with a dithered gray background displayed by the display device; and estimating the gray balance of the display device based on the selected one of the gray element or selected red-blue shifted gray element.

Claims 7-8 depend on claim 6, claims 18-20 depend on claim 17, claims 32-33 depend on claim 31.

***Response to Amendment***

10. Applicant's arguments filed on 05.09.05 with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

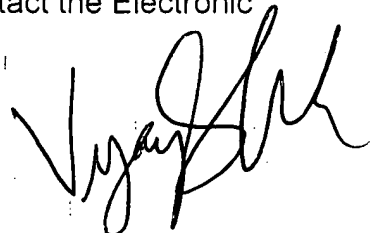
***Telephone inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Ls  
07.20.05

  
**VIJAY SHANKAR  
PRIMARY EXAMINER**